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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,543	10/15/2001	Matthew M. Persohn	65857-0033	1294
10291	7590	01/22/2004	(01-AQP-275-VA)	
RADER, FISHMAN & GRAUER PLLC 39533 WOODWARD AVENUE SUITE 140 BLOOMFIELD HILLS, MI 48304-0610				
EXAMINER DUNWOODY, AARON M				
ART UNIT		PAPER NUMBER		
3679				

DATE MAILED: 01/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/977,543

Applicant(s)

PERSOHN ET.AL

Examiner

Aaron M Dunwoody

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-17 and 29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-17 and 29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 14.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Drawings

The drawings were filed on 12/29/03. These drawings are approved.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 2-10 and 12-17 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by US patent 6186557, Funk.

In regards to claim 29, in Figure 12 below, Funk discloses a coupling assembly, comprising:

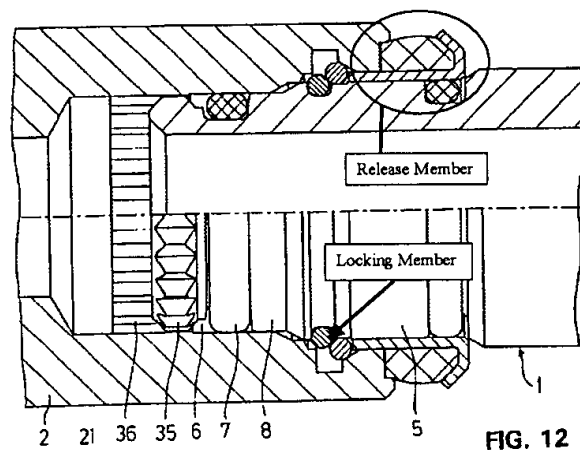
a first member (1) having an exterior surface, the exterior surface including at least one engagement feature(35);

a second member (2) having a portion for receiving a portion of the first member, the receiving portion having at least one interior surface that includes at least one locking feature (36) configured to mate with the engagement feature of the first member

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to substantially prevent rotation of the first member relative to the second member during connection thereto; and

a release member moveably mounted on the first member for releasing the first member from the second member, the release member including a flexible sealing portion configured to sealingly engage the second member upon connection of the first and second members.



In regards to claim 2, Funk discloses the engagement feature being defined by at least one protrusion in the exterior surface of the first member, the protrusion extending outward from a base reference point (any convenient point).

In regards to claim 3, Funk discloses the locking feature is defined by at least one interruption in the interior surface of the receiving portion, the interruption extending outward with respect to the base point.

In regards to claim 4, Funk discloses the engagement and locking features being received in the corresponding protrusion and interruption of the opposing member to create a radial interference.

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In regards to claim 5, Funk discloses a plurality of protrusions and interruptions, the protrusions and the interruptions located on the respective members such that there is at least one orientation, wherein the members may fully engage by way of a mating of the protrusions and the interruptions.

In regards to claim 6, Funk discloses the engagement feature comprising a plurality of teeth.

In regards to claim 7, Funk discloses the locking feature comprising a plurality of grooves, the teeth of the first member configured to intermesh with the grooves of the second member.

In regards to claim 8, Funk discloses the engagement feature comprising a plurality of tabs.

In regards to claim 9, Funk discloses the locking feature comprising a plurality of slots that are configured to receive the tabs of the first member.

In regards to claim 10, Funk discloses several engagement features being substantially equidistantly spaced around the exterior surface of the first member.

In regards to claim 12, Funk discloses the engagement feature including a tapered ramp and a shoulder.

In regards to claim 13, Funk discloses an apex being disposed between the tapered ramp and the shoulder.

In regards to claim 14, Funk discloses the apex being a substantially flat surface.

In regards to claim 15, in Figure 12 above, Funk discloses a locking member is disposed between the first and second members (in a radial direction from the axial

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centers of 1 and 2) for substantially locking movement of the first member relative to the second member in an axial direction.

In regards to claim 16, Funk discloses when the first member is sufficiently inserted into the second member, the exterior surface passes through the locking member where, upon further insertion, the locking member is expanded over the apex until it clears the apex, whereby the locking member contracts to a position between the first member and the second member to interconnect the members.

In regards to claim 17, Funk discloses the receiving portion of the second member including an inwardly facing groove for receiving therein the locking member.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Funk in view of US patent 4280723, Moldestad.

In regards to claim Funk discloses the claimed invention except for several engagement features being non-equidistantly spaced around the exterior surface of the first member. Moldestad teaches several engagement features (38, 40, 42, 44) being non-equidistantly spaced around the exterior surface of the first member (32) so that "the male and female couplings cannot be even partially engaged, unless the first and second patterns match one another in complimentary manner"(col. 2, lines 1-3). As

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Moldestad relates to a safety device for use in a fluid transfer system, it would have been obvious to one having ordinary skill in the art at the time the invention was made to fabricate several engagement features with non-equidistantly spaced around the exterior surface of the first member so that the male and female couplings cannot be even partially engaged, unless the first and second patterns match one another in complimentary manner, as taught by Moldestad.

Response to Arguments

Applicant's arguments with respect to claims 2-17 and 29 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron M Dunwoody whose telephone number is (703) 306-3436. The examiner can normally be reached on Monday - Friday between 7:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H Browne can be reached on (703) 308-1159. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

.amd


Lynne H. Browne
Supervisory Patent Examiner
Technology Center 3670